

Medical

In 2020, Global Force Health Protection (GFHP) integrates joint capabilities in the theater and the sustaining base, is led by a global joint medical command, leverages the global information grid (GIG), and focuses upon four major tasks. The first is to reduce the incidence of disease and non-battle injury through sound preventive medicine and health promotion programs. Second, reduce casualties incurred in operations or from combat stress through training programs and early intervention. Third, provide essential medical care and treatment in theater for acute illnesses, injuries, or wounds; evacuating those patients who cannot return to duty within the theater evacuation policy to appropriate definitive health care. Finally, rapidly return to duty all patients once medically fit. The Army enables this joint medical system through Doctrine, Organizations, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF) derived tactical and operational capabilities that mirror the supporting business enterprise and theater architectures to seamlessly support joint functional concepts.

Joint Force Protection. The Soldier is the most critical or pacing item of the Future Force—the centerpiece of our formations. The Soldier is trained, equipped, protected, and treated holistically beginning with accession in the CONUS base and continuing through training within the institutional Army and units, global deployments, and sustainment during the years of retirement in compliance with existing law and national policy.

GFHP empowers soldiers with health knowledge and promotion programs to prevent the onset of disease. Through the advancement of vaccines, fitness and wellness studies, and a variety of predictive interventions, soldiers avoid common health issues, and thereby contribute to a healthy and fit force.

The Army protects its soldiers and the personnel of other services through medical surveillance capabilities that are jointly nested throughout the entire battlespace. Disease, toxic industrial chemicals (TIC), toxic industrial materials (TIM), and Chemical, Biological, Radiological, Nuclear, and High Yield Explosive (CBRNE)

threats are detected through these sensor-based capabilities. The shared collaborative environment that is enabled by joint medical information systems assimilates and analyzes this data, and translates it into pre-emptive countermeasures.

Current vaccines for agents such as smallpox, anthrax, botulinum, scrub typhus, and shigella provide effective protection for our forces from biological threats. Chemical prophylaxis similarly protects soldiers from the effects of chemical weapons. CBRNE incidents are managed in accordance with science-based models that enable commanders and interagency directors to provide responses with appropriately scaled medical capabilities.

State of the art medical care remains close to the Soldier through capabilities that are smaller, lighter and more easily sustained as a result of technologies and materiel improvements. Forward surgery is organic to the Units of Action (UA), and casualty care is continuous using platforms configured to allow expert treatment on the move. The Units of Employment (UE) employs and synchronizes medical capability packages that are tailored for specific mission requirements. Morbidity and mortality are significantly reduced through the fielding of enablers such as the automated remote triage and treatment capabilities embedded in Objective Force Warrior ensembles, advanced hemorrhage control, and the use of freeze dried plasma.

The force links functionally and electronically to the institutional Military Health System, providing dynamic reach in the form of specialized expertise and capabilities as required. This reach capability provides training expertise, military medical research and development, and key linkages with industry and other federal, civilian, and multi-national health agencies.

Battlespace Awareness. The shared collaborative environment again enables the maintenance of situational awareness for deployed medical forces, generating forces, and relevant parts of the industrial base. A longitudinal, digital, medical record documents pre- and post-deployment medical readiness status of all soldiers. Redundant and survivable medical information networks ensure appropriate monitoring of all personnel whether engaged in combat operations or aboard an evacuation platform enroute to a more definitive level of care. Commanders and clinicians have the

requisite situational awareness to facilitate decision-making about medical readiness of deployed forces or the necessity of medical intervention in an individual soldier.

Digitized health surveillance, diagnostic, and treatment information moves electronically and seamlessly from the battlespace back to the institutional Military Health System where permanent digitized health information is available wherever and whenever needed. The supported commander medically protects his force by truly seeing first, understanding first, and acting decisively.

Focused Logistics. Future Force medicine maintains its focus on the sustainment of the Army's most precious asset—the Soldier. The business enterprise architectures and theater architectures yield organizations, training, and leader development capabilities that provide for the seamless sustainment of medical logistics in the sustaining base and theater. The doctrine, training, and leader development of medical logisticians enables medical support to maintain high standards of care, acquire state of the art technology, and ensure the availability of safe and effective pharmaceuticals in a manner that is responsive to the needs of the soldiers of the Future Force.

The collaborative efforts of the operational, programmatic, and acquisition community enable the medical logistician to provide an affordable and clinically responsive medical materiel acquisition program that keeps pace with technology. Medical materiel is also stored and maintained in a strategically responsive and affordable manner utilizing power projection/power support platforms, industrial facilities, and prepositioned stocks within war reserve programs.

The joint medical information systems, and various transportation modalities enable medical logistics sustainment. The shared collaborative environment enables medical logisticians from foxhole to the industrial base to predict, document, requisition, transport, and monitor the global sustainment of deployed medical forces. The maturation and evolution of the joint medical information program and its integration into the joint command, control, computers and communications networks, optimizes stockage levels, reorder points, and enables in-transit visibility.

Unmanned air and ground vehicles assist in the delivery of medical supplies, materiel, blood, and gases (Class VIII). Synthetic blood products, technological advances, digitization, miniaturization, and composite materials minimize the logistics footprint through reduced demand for refrigeration, power, fuels, and associated ancillary staffing requirements. Medical maintenance capabilities include the ability to remotely monitor the calibration of sensitive medical equipment and remotely diagnose maintenance problems.

Battle Command. A joint medical command globally optimizes the employment of medical forces through appropriate scaling of Service capability packages. This allows the Joint Force commander to tap the resources and capabilities of a single military medical services, in addition to that of industry and partnerships with private and public health agencies.

Medical support to the Army requires a unique capability to provide responsive medical support to non-contiguous, land warfare. The joint command function ensures that quality medical care is continuous, proximal, flexible, and mobile through appropriate scaling. It balances the optimum employment of evacuation platforms with medical treatment and surgery platforms to address the realities of the battlespace (mission, enemy, terrain, time, etc). Medical support is a flexible, responsive, and dedicated medical evacuation capability via ground and air. Medical evacuation by air is accomplished by rotary or fixed wing airframes with vertical takeoff and landing (VTOL) and short takeoff and landing (STOL) capabilities with extended range and speed capabilities to responsively support the extended battlespace. The scaling, integrating, and tailoring of various capabilities such as medical treatment and evacuation, Class VIII requirements, theater patient movement control, theater medical information network integration, medical surveillance and pre-emptive intervention are all functions of medical battle command and the medical common operating picture

Conclusion. The employment of medical capabilities in the joint warfighting capabilities of joint force protection, battle command, battlespace awareness, and focused logistics is a complex art and science. The medical command ensures that the

provision of combat health support is synchronized with non-medical enablers such as communications networks, movement control, and theater airspace command and control. Medical command and control units provide the core capabilities for formation of a theater joint medical command.